

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2004/001593

A. CLASSIFICATION OF SUBJECT MATTER

Int. CL⁷: C12N 5/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
SEE BELOW

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
SEE BELOW

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Databases: WPIDS, CAPLUS, MEDLINE, BIOSIS.

Keywords: stem()cell/pluripotent()cell/progenitor()cell/embryonic stem cell/ES cell; differentia?; blood()cell/erythrocyte/reticulocyte/megakaryocyte/lymphocyte/platelet/monocyte etc; hematopoietic/haematopoietic/hemopoietic/haemopoietic; cell therapy; in vitro/ex vivo/culture; aggregat?

DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| X | WO 2003/050251 A2 (Geron Corporation) 19 June 2003 p. 12 line 4 – p. 14 line 13, examples 1-4, claims 13-36. | 1-11 |
| X | US 6,280,718 B1 (Kaufman et al.) 28 August 2001 Column 5 line 9 – Column 7 line 32, Claim 9. | 1, 5-11 |

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

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| * Special categories of cited documents: | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" earlier application or patent but published on or after the international filing date | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" document member of the same patent family |
| "O" document referring to an oral disclosure, use, exhibition or other means | |
| "P" document published prior to the international filing date but later than the priority date claimed | |

Date of the actual completion of the international search
14 January 2005

Date of mailing of the international search report
21 JAN 2005

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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|---|--|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | EP 1344819 A2 (Novartis AG) 17 September 2003 [0042]-[0050], [0055]-[0057], claims 9 and 10 | 1, 5-11 |
| X | US 5,635,386 A (Palsson et al.) 3 June 1997 Example 2, Claims | 1, 5-11 |
| P, X | US 2004/0224403 A1 (Bhatia, M.) 11 November 2004 [0034]-[0037], [0072]-[0102], Example 3, Claims 8, 9 | 1-11 |
| X | Chadwick, K. et al., 2003 (August), Cytokines and BMP-4 promote hematopoietic differentiation of human embryonic stem cells, <i>Blood</i> , 102(3): 906-915. Whole Document | 1-11 |
| X | Kaufman, D. S et al., 2001, Hematopoietic colony-forming cells derived from human embryonic stem cells, <i>Proceedings of the National Academy of Sciences USA</i> , 98(19): 10716-10721. Whole document | |
| A | Dang, S.M. et al., 2002, Efficiency of embryoid body formation and hematopoietic development from embryonic stem cells in different culture systems, <i>Biotechnology and Bioengineering</i> , 78(4): 442-453. Whole Document | 1-11 |
| A | Desbaillets, I. et al., 2000, Embryoid bodies: an in vitro model of mouse embryogenesis, <i>Experimental Physiology</i> , 85(6): 645-651. Whole document | 1-11 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001593

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report | | | Patent Family Member | | | | |
|--|------------|----|----------------------|----|------------|----|------------|
| WO | 2003050251 | CA | 2469483 | EP | 1463803 | GB | 2399572 |
| | | US | 2003153082 | US | 2004224403 | | |
| US | 6280718 | AU | 69404/00 | BR | 0015374 | CA | 2390281 |
| | | EP | 1228194 | NO | 20022180 | SE | 0201328 |
| | | US | 2002015694 | US | 2004043484 | WO | 0134776 |
| EP | 1344819 | AU | 73986/91 | CA | 2039315 | EP | 0451611 |
| | | JP | 7313150 | JP | 2000078968 | US | 5061620 |
| | | US | 5643741 | US | 5716827 | US | 5750397 |
| | | US | 5763197 | US | 5914108 | | |
| US | 5635386 | AU | 34228/93 | AU | 39148/93 | AU | 39740/89 |
| | | AU | 50592/96 | AU | 91750/91 | BR | 8907575 |
| | | CA | 2062741 | CA | 2100268 | CA | 2131385 |
| | | DK | 4691 | EP | 0434693 | EP | 0477290 |
| | | EP | 0575350 | EP | 0629236 | EP | 0753574 |
| | | EP | 1473360 | HK | 1007413 | JP | 11221074 |
| | | JP | 2000189157 | JP | 2001120261 | NO | 910287 |
| | | US | 5139519 | US | 5192317 | US | 5399493 |
| | | US | 5437994 | US | 5459069 | US | 5605822 |
| | | US | 5646043 | US | 5670147 | US | 5670351 |
| | | US | 5763266 | US | 5888807 | US | 6326198 |
| | | US | 2002022270 | US | 2003087432 | US | 2004063201 |
| | | US | 2004180432 | WO | 9000889 | WO | 9015877 |
| WO | 9211355 | WO | 9312805 | WO | 9318132 | | |
| US | 2004224403 | CA | 2469483 | EP | 1463803 | GB | 2399572 |
| | | US | 2003153082 | WO | 03050251 | | |

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX